

Merit Based Values for Economic Success: A Compensatory Control Function of Ideology

By

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Abstract

System Justification theory has long considered the motivational reasons for legitimizing the status quo. Recent work has identified a compensatory control mechanism that motivates the endorsement of ‘external’ systems of control, or those systems found outside of individual aspects of the subject. This paper builds on this work by showing that people can use the individualized ideology of merit to satisfy the epistemic need to perceive personal control in life. Across three studies, we find strong empirical support for this prediction, showing that greater endorsement of merit based values for success is associated with greater perceptions of personal control leading to positive perceptions of future economic success (Study 1). Lowered levels of personal control can be attenuated by reaffirming the value of specific meritocratic methods for economic success, and this affirmation leads to a positive evaluation of future economic prospects (Study 2). Threats to merit based prescriptions for economic success, such as hard work and effort, lead to a decrease in perceived personal control (Study 3). Over three studies we show that merit based values directly influence perceptions of personal control and future economic success.

Merit Based Values for Economic Success: A Compensatory Control Function of Ideology

“The American Dream is that dream of a land in which life should be better and richer and fuller for every man...a dream of social order in which each man and each woman shall be able to attain to the fullest stature of which they are innately capable, and be recognized by others for what they are, regardless of the fortuitous circumstances of birth or position.”

James Truslow Adams, 1931, p. 415

In *The Epic of America* (1931) James Adams paints a promising picture of life in America, illustrating a fundamental belief in American culture that emphasizes that all individuals (regardless of group membership) have the opportunity and right to a better, richer, and fuller life based on individual merit. It is in this novel that Adams coins the term “American Dream” which has come to represent a specific ideology in America that is known as meritocracy (e.g., the system rewards those who have talent and work hard). For present purposes I borrow from Jost et al. (2009) and define ideology as a mix of critical and value neutral components that can (1) help individuals understand and organize information and (2) act as an influence on both conscious and unconscious motives to uphold societal status quos.

At a conceptual level, meritocracy represents an ideal social system. Under this system each person should be afforded a basic level of resources to meet their requirements, and any additional resources are allocated to those who have earned them through hard work and natural talent. A true meritocratic system, by providing equal opportunity for everyone, should ensure that all status differences between individuals are due to natural differences in talent, hard work and effort rather than any categorical differences (social class, gender, ethnicity, etc.).

However in practice, this meritocratic system has not entirely lived up to those ideals laid out by the founders of America. Often certain groups have had to fight for their right to equal opportunity and full acceptance under the law (women’s suffrage movement, civil rights movement, etc.). Despite some failings of the meritocratic system in America, merit based values

for economic success have been, and still are, highly endorsed in American society (PEW Research Center, 2011). This should not come as a surprise as often hard work and effort typically *do* lead to more success. For example, the college professor who spent 8 or more years in college does on average make more money than the janitor who cleans her office. She earns a higher salary due to the expertise needed for her position. Expertise that she gained due to her hard work in research, intelligence gained through education, and the tenacity to complete a dissertation.

We are not arguing that hard work and effort do not lead to success, indeed in a perfect world they would be all that one needed for higher resource attainment, as meritocracy contends. However, it is the omission of other important factors for economic success that are beyond the individual's control (SES of parents, gender, ethnicity, etc.), that makes the relationship between meritocracy and perceived personal control of psychological interest. The purpose of this work is to identify one of the psychological processes that motivate individuals to endorse a conceptual (ideological) viewpoint that has not been entirely supported in practice.

Meritocracy is often thought of at the system level, meaning it is viewed as an external socio-political *system of distribution* that rewards those who work hard, put in effort and have a degree of natural talent or intelligence. For example one could call Capitalism (an economic system) an example of meritocracy in that it claims to reward hard work and effort with profit. However, meritocracy can also be conceptualized at the level of the individual, i.e., as the specific beliefs and values regarding economic attainment held by the individual (Kluegel & Smith, 1986). At the personal level meritocracy represents the endorsement of merit based values for success and the belief that everyone has an equal opportunity to prosper.

The present work investigates meritocratic values at the individual level. We will argue that meritocratic prescriptions for economic success satisfy the epistemic need for personal control, making it an attractive belief system for those seeking to affirm a sense of mastery over their life. We chose to investigate the relationship between meritocracy and personal control because meritocracy is central to the self – it is the fundamental assertion that people can have control over their life's outcomes. Without some sense of personal control, all the unique aspects of the self (intelligence, tenacity, creativity, etc.) one can envision, cannot be counted on to produce the desired access to economic resources in a merit based system.

Ideologies are often used to both understand and interpret the world as it is, and how one believes it should be (Jost, Federico & Napier, 2009). These ideological belief systems are ideal psychological mechanisms for satisfying multiple epistemic needs of the individual, such as motivations to see experiences in the world as having meaning and predictability (Festinger, 1957; Heider, 1958, Lerner, 1980) Because meritocratic values encourage individuals to attribute success to their own controllable efforts, endorsement of these values should affirm a sense of order and control over outcomes in life. Similarly, work within attribution theory (Heider, 1958) has shown that the need to suppress ambiguity and enhance the ability to explain events leads to an overestimation of internal attributes for success and an under appreciation of external factors.

The emphasis on individualism within American society resonates with the meritocratic belief that people are responsible for and able to achieve their own economic success (Kluegel & Smith, 1986). Countless “rags to riches” stories of individuals rising up through the ranks of the social strata by hard work and talent are woven into the American fabric. These stories of success work to maintain the ideal of meritocracy by providing evidence of equal opportunity for all. However, there are countless unheard stories of individuals for whom the “American Dream”

is out of reach despite their willingness to work hard (see New York Times, 2005; Shipler, 2004). So exactly how achievable is this American Dream for the average citizen?

Intersection of Economic Indicators and Psychological Experience in the U.S.

In 2007 one eighth of all Americans lived below the \$20,000 yearly income poverty level and that almost 40% of those individuals earn only \$10,000 yearly (Frank, 2010). Since the mid-1970's there has been a steep increase in the proportion of economic inequality in America (measured by the genie coefficient) as less of the population is in control of a greater portion of the overall wealth (US Census, 2009). This growing economic inequity is even more troubling when one considers the glaring group-based differences in distribution of (economic) resources within the United States (see Sidanius & Pratto, 1999 for a review). For example, in 2010, the female-to-male earnings ratio of full-time, year-round workers was 0.77, meaning that on average fulltime working women only earn 77 cents for every dollar earned by fulltime working men (US Census, 2011).

Following the recession of 2008, the average percentage of *household wealth*¹ indicated Hispanic households losing over 60%, Black households losing over 50%, while White households suffered a loss of only 16% (PEW Research Center, 2011). Why was there such a disparity in loss rates of household wealth? Black and Hispanic families, on average, have very limited household wealth such that a majority of what they do have is in the form of home equity compared to Whites who on average have a greater variety of economic assets. When the housing market crashed these two groups suffered drastic losses to their wealth compared with Whites (PEW Research Center, 2011). Furthermore, a U.S. Census Bureau abstract (2011) reported that *poverty rates* for African Americans and Latinos were over two times higher than

¹ Household wealth is measured by subtracting economic debt (i.e., credit cards, mortgages, student loans, etc.) from economic assets (i.e., home equity, savings accounts, 401K, etc.).

those for whites, 24% and 23% respectively, compared to 11% of Whites. Recent data shows that 2009 *unemployment rates* for African Americans and Hispanics were 15.6% and 12.6% respectively, compared to 8% of Whites (PEW Research Center, 2011). It is hard to balance such disparities in distribution of economic resources with a system that supposedly provides equal opportunity for all. One would have to admit that meritocracy in practice has some flaws or, that on average, non-whites and women are simply less motivated, less intelligent or less concerned with economic attainment than White males. Because the second argument is inherently flawed, we move forward under the assumption that there are group based discrepancies in access to economic resources within the American economic system.

Despite inequity and pronounced group-based differences in the United States, there seems to be extraordinary faith in merit-based prescriptions for success among individuals. National representative data from the Economic Mobility Project (PEW Research Center, 2011) shows that 91% of respondents list “hard work” as one of the most important, if not the most important factors for economic success in America. Likewise, 90% also listed “drive” and “personal ambition” as two of the most important factors for economic success. This same survey found that 68% of respondents believe they are in control of their economic situation, and that they either have achieved, or will achieve the American Dream.

In summary, economic indicators attest to a large gap between those who have and have not and accompanying group-based differences. Nevertheless, there is still a high degree of support for individual-based prescriptions for achieving (socio-economic) success. The purpose of this paper is to examine what makes meritocracy so psychologically compelling for the individual despite evidence for group based differences in resource attainment. I argue that part of the authority of merit based values is that they fulfill certain epistemic concerns (e.g., personal

control) regardless of whether it delivers on instrumental outcomes (e.g., being rich, owning a home). Understanding the psychological processes that frame meritocratic values is particularly important in a U.S. context that is defined by deepening economic inequity and glaring group based disparities.

In the remainder of the article, I elaborate on how meritocracy is a specific ideology, and then rely on the existing literatures to hypothesize that endorsement of merit based values for success (meritocracy) is associated with greater perceptions of personal control and expectations of future economic success (Study 1). That lowered perceptions of personal control can be compensated for by highly endorsing merit based values for success, and that greater validation of these meritocratic values instills a sense of control over future economic outcomes for the individual (Study 2). Threats to merit based values for economic success, such as hard work and effort, will lead to a decrease in personal control, but that this threat will not carry over to more global assessments of the American system, showing that threats to merit based prescriptions for success are distinct from more global “meaning” threats (Study 3).

Meritocracy as Ideology

There are many forms of ideology that can be utilized by a dominant class to explain why social inequalities are legitimate or justified (see Jackman, 1994; Sidanius & Pratto, 1999). From a Monarchist viewpoint of superior blood lines and holy writ determining the affluent and powerful to an autocratic viewpoint of the elite knowing what is best for all. While these belief systems may claim that one’s bloodline or social status is an authentic foundation for supremacy, their legitimacy is often questioned and rejected (at least in principle if not in action) by many of those they oppress. In contrast to these examples, meritocracy offers a view of inequality that garners support from both dominants and subordinates alike. Unequal distribution of resources

among individuals is “justified” because it is illustrative of differences in individual talents, work ethic, and merit (Croizet & Millet, 2012). That is, inequalities are seen as ‘natural’ and representative of ‘true’ differences in people. More relevant to the present work, is the notion that meritocracy also provides a *prescription* for future success, namely that working hard, ability, and being persistent will lead to positive outcomes for the individual (Hochschild, 1995). The appeal of meritocracy is that it provides individuals with a sense of control over their economic outcomes.

Meritocracy has also been defined as a hierarchy-enhancing legitimizing myth and/or a belief system that obscures institutional privilege and discrimination in the U.S. (Chen & Tyler, 2001; Jackman, 1994; Jost & Banaji, 1994; Marx & Engels, 1877/1981; Sidanius, 1993). Social dominance theory, for example, argues that social systems tend to be organized as group-based social hierarchies with some groups at the top (i.e., dominants) and others at the bottom (subordinates; Sidanius, 1993). Group-based hierarchies and uneven distribution of resources can be seen as legitimate when viewed through social ideologies like meritocracy that provide a rationale for why inequity is inherent in the social system (see Sidanius & Pratto, 1999). Within a meritocratic system, people are urged to focus on the self rather than the group, in this way justifying the status quo by denying discrimination or privilege based on group membership. It may seem counterintuitive, yet this belief has been supported throughout American history by both those Americans who have succeeded and those who have not (Kluegel & Smith, 1986; Lane, 1962; Scott & Leondhardt, 2005; PEW Research Center, 2011).

“The surest method of social control is to induce subordinates to regulate themselves. To that end, the unmediated weapon of choice is ideology” (Jackman, 1994, p. 59).

An ideology that justifies power and status differences must be palatable to both dominants and subordinates: it needs to meet the demands of dominant group members by seeming personally rewarding, while at the same time appealing to subordinates' sense of fairness (Jackman, 1994). Dominants can find rewarding the 'knowledge' that their success is due to their personal efforts rather than status and privilege afforded to them by birth. In turn, this illustrates to subordinates the legitimacy of the status relations, that equality of opportunity means they too can achieve a higher position. Meritocracy seems to create a sense of control at the individual level. Dominants see that they were in control of their past successes because they resulted from their hard work and talent. And subordinates 'know' that they control their future economic prospects by controlling how much hard work and effort they put into achieving financial success.

By promoting and promising the protection of the individual above all else, and by doing so providing a principled argument against aggregate group demands, meritocracy upholds the individualistic morality of American culture and obscures attention to group based tactics for economic success. All persons within a meritocratic society are discouraged from using collective arguments, as this interferes with the natural and legitimate rights of the individual (Jackman, 1994). This position is especially salient in current discourse over a nationalized healthcare system in the United States, with the many of the affluent and poor alike arguing that this system, based upon group needs, is in violation of the inherent American right of the individual to choose for herself (Saulny, 2012).

Thus, meritocracy is not simply a rationalized model of status relations, but a moral framework that integrates into the entire social structure, affecting how the structure of relations is understood and interpreted by all participants. Because of its individualized nature, supported

by a more broad socio-political system, meritocracy promotes protection of the individual above all else. Alternative approaches, such as affirmative action, are viewed as deviating from the “spirit” of American culture and often framed as a type of “reverse” discrimination against dominant group members. Opposition to affirmative action then may stem from a threat to meritocratic and individualistic values (Garcia, Desmarais, Branscombe & Gee, 2005; Dovidio & Gaertner, 1996; McCoy & Major, 2007). Perceptions of personal control afforded by meritocracy can motivate the disregarding of privilege for dominant group members by reaffirming success based on individual merit, while at the same time legitimizing status relations for subordinates as their success is resting on their own merit (Chen & Tyler, 2001; Jackman, 1994).

Meritocracy is composed of both top-down and bottom-up ideological content by its institutionalized legitimacy and its fulfillment of individual epistemic needs (Jost et al., 2009). From a top-down perspective Americans are socialized from an early age to regard merit as an honorable and respected reason for success, learning that through hard work and effort one has control over most of life’s outcomes. And from a bottom-up perspective, individuals have an epistemic need to explain, predict, and control their world, leading them to endorse dominant ideologies like meritocracy that can help to meet that need.

Meritocracy and Personal Control

System Justification Theory (see Jost, Banaji & Nosek, 2004 for a review) posits that individuals are motivated by epistemic needs to justify and endorse dominant ideologies and the social systems they represent. It has been theorized that epistemic needs for control are a likely antecedent for upholding the status quo and because we strive to see our world as predictable and non-chaotic, we come to justify social systems that provide a sense of order (Jost & Hunyady, 2002; Jost, Federico, Napier, 2009). In line with this, we believe that the epistemic need for

control motivates the endorsement of meritocratic ideology (as a specific aspect of the overall American system) which creates a perception of personal control through prescriptions for economic success (e.g., if you work hard enough you will achieve your dreams).

Dominant and subordinate group members often both believe and endorse the prevailing system (Jost, Banaji, & Nosek, 2004; Jost, Blount, Pfeffer, & Hunyady, 2003). Research has shown that high status individuals, who strongly advocate meritocracy, blame low status group members for their failure to succeed (because it is within their control), *and* low status individuals also endorse this explanation (Cozzarelli, Wilkinson, & Tagler, 2001; Crandall, 1994). Subordinate group members can also suffer from self-doubt and a loss of esteem when told their success is due to external causes (e.g. affirmative action policy) instead of merit (Tyler, Boeckmann, Smith, & Huo, 1997). While seeing the current system as fair and legitimate is often tied to positive outcomes for dominants, such as increased self-esteem, positive affect, and in-group liking, often the reverse relationship is found for subordinate group members (Jost & Thompson, 2000; Rankin, Jost & Wakslak, 2009). However, I argue that a perception of personal control, afforded to all individuals who endorse meritocracy, is a critical and important positive outcome.

Compensatory control. Recent theorizing in the compensatory control literature has proposed that “...threatening people's sense that they have control over outcomes in their life heightens reliance on sources of control outside the self” (Shepherd, Kay, Landau & Keefer, 2011, p.949). When personal control is lowered, the endorsement of external sources that provide order in the social world can deliver the needed sense of order and structure for the individual. If external systems of control such as governments, religions, or social institutions are seen as a source of social order that seeks to serve its followers (benevolence), when individuals

feel a lack of personal control they may compensate for the loss of personal control by highly valuing and supporting these external sources of control (Kay et al., 2008).

Research under this perspective demonstrates that when personal control is in question participants highly endorse an external social system that provides order and control (Kay, Gaucher, Peach, Laurin, Friesen, Zanna, & Spencer, 2009). When suffering a threat to personal control, participants were more supportive of a national culture depicted as promoting a sense of control and order than one promoting a valued social identity (Shepherd et. al, 2011). A vast, multi-national study illustrated that individuals with lower levels of perceived personal control were more supportive of governmental control (Kay, Gaucher, Napier, Callan, & Laurin, 2008). Further work shows that threatening personal control leads to an increase in defense of the federal government, linking perceived personal control to justification of the more general socio-political system (Kay et al., 2008).

The emphasis in the compensatory control literature has been on how the individual can utilize external systems of order to compensate for their own lack of control. However, I hypothesize that in the context of the American economic system, an ideological belief system that focuses on individual based values (meritocracy) may be utilized in the same way as an external social system or a religious deity to fulfill this need. This is not meant to imply that people will not use external systems to compensate for a loss of personal control, indeed the research clearly shows they will. I am claiming that if instead of an external system, individuals are given a chance to reaffirm merit based values for success, they need not look to outside systems for control as this belief in individual merit provides the necessary protection against control threats.

As I have argued, meritocracy can be viewed from the level of the individual, conceptualized as an internalized belief system. It represents the beliefs that are “passed down” from the social system (emphasizing individual responsibility and opportunity) that have become *internalized*, and now take the form of personalized beliefs that provide the *means* to attain perceptions of personal control. Therefore, when personal control is lowered and meritocratic values are salient, individuals can use this ideology to protect or reestablish personal control *through their own efforts*, rather than look to a benevolent external structure to fulfill it for them. The goal of the present research is to add to this literature by examining the role of meritocracy as it relates to needs for personal control and beliefs in future economic success.

Overview of the current research

Three studies were conducted to test these proposed relationships. I hypothesized that individuals who highly endorse meritocratic values for success would also perceive high levels of personal control and high levels of perceived future economic success. I tested this hypothesis in study 1.

I also hypothesized that individuals who had their personal control lowered would highly endorse meritocratic values for success, and that this endorsement would enable them to perceive a positive economic future. I tested this hypothesis in study 2.

Finally, I hypothesized that threats to specific merit based prescriptions for economic success would lead to lowered perceptions of personal control, but that this threat would not affect attitudes towards the overall American system, showing a specific threat effect rather than a general threat to meaning. I tested this hypothesis in study 3.

Study 1

Study 1 provides an initial investigation of the hypothesis that individuals who endorse merit based values for success perceive greater personal control, and that this feeling of control leads to greater belief in future economic success.

Method

Participants. Ninety-eight participants (33 women, 2 unknown) were recruited via Amazon's Mechanical Turk online service. The sample ranged in age from 18 to 89 ($M = 28.37$, $SD = 9.34$) and was predominantly White/Caucasian (89%). Sixty-three percent of the sample indicated they were employed.

Procedure. Participants were asked to fill out an online survey assessing individual personality and political attitudes. Measures included perception of personal control, future prospects for economic success, global system justification, and demographics. After completing measures, participants read a debriefing page and received payment (\$0.40) for participation.

Measures

Personal control. Twelve items from both the Personal Efficacy Scale (Paulhus, 1983) and Mastery Scale (Pearlin et al., 1981) were presented to participants. Items included: "The events in my life are mainly determined by my own actions," "To a great extent my life is controlled by accidental happenings" (reversed), and "What happens to me in the future mostly depends on me". Unless otherwise noted, all items for this and remaining scales were rated on a 7-point scale ranging from 1 (*Strongly Disagree*) to 7 (*Strongly Agree*). These items formed a reliable perception of control scale ($\alpha = .91$).²

Future economic success. Six items were developed to measure respondent perceptions of their own future economic success. Items included: "I believe I will be able to make more money in the future," "I believe I will be able to improve my standard of living," and "My

² For a full listing of all measures used see Appendix A

chances for getting ahead in life represent a fair and just system.” The six items formed a reliable perception of future success scale ($\alpha = .88$).

Meritocratic value endorsement. Nine items from the Capitalist Values Scale (McClosky & Zaller, 1984) were presented to participants. Items included: “Getting ahead in the world is mostly a matter of ability and hard work,” “Capitalism teaches people the value of hard work and success,” and “Any person who is able and willing to work hard has a good chance of succeeding.” These items formed a reliable meritocratic value endorsement scale ($\alpha = .89$)

Results

I first computed and examined the bivariate correlations among the variables. As predicted, meritocracy ($M = 4.4$, $SD = 1.09$) was positively correlated with perception of personal control ($M = 4.7$, $SD = 1.0$, $r = .63$, $p < .001$) and future success ($M = 4.8$, $SD = 1.2$, $r = .65$, $p < .001$). In addition, future success was positively correlated with personal control, $r = .78$, $p < .001$.

Relationship between Meritocracy and Personal Control

I next performed a mediation analysis to test the prediction that the relationship between meritocracy and perceptions of future economic success is mediated by perceived personal control. Using Preacher and Hayes’s (2008) bootstrapping procedure, I regressed future economic success onto merit based values with personal control entered as the proposed mediator. Five-thousand bootstrap resamples were performed. As predicted, the 95% confidence interval obtained for the indirect effect of merit based values on perceived future economic success through the mediator of personal control did not contain zero (.26 , .59). (See Fig. 1 for a graphical depiction of the mediation model.) These results support the hypothesis that greater

endorsement of merit based values lead to more positive views of future economic success, and that perceptions of personal control partially mediates this relationship.

Discussion

Study 1 provides evidence for the relationship between merit based values and individual perceptions of personal control, and moreover that perceptions of control then lead to the belief in a prosperous economic future. To our knowledge this represents the first test of the relationship between specific merit based values for success and personal control. These findings provide insight into the relationship between personal control and meritocracy, such that those who endorse meritocracy have greater perceptions of future economic achievement, and that this relationship is mediated by increased perceptions of personal control. Based on the findings of study one, it is plausible that the endorsement of merit based values can reduce the effect of a threat to personal control, which I test in study 2.

A limitation of study 1 is that it only shows a partial mediated relationship between our three variables. Because personal control did not account for the entire relationship between meritocracy and future success, we have to assume there is more to this relationship than just perceptions of control. However our model did account for a large portion of the variance between meritocracy and future success and does provide strong evidence for the proposed relationships. Another limitation of the present study is that it is correlational and so the found set of relationships cannot unequivocally rule out alternative explanations and verify a causal relationship. In response, study 2 began to experimentally test these set of relationships.

Study 2

Study 2 tested whether endorsement of merit based prescriptions for success can alleviate a threat to personal control, and whether this alleviation suppresses the effects of threatened

control on perceptions of a prosperous economic future. The study employed a previous method used by Kay et al. (2008) to experimentally manipulate personal perceptions of control. After the manipulation participants were assessed for endorsement of merit based prescriptions for success and perceptions of future economic success.

Method

Participants. Eighty eight participants (51 women) were recruited via Amazon's Mechanical Turk online service. The sample ranged in age from 18 to 80 ($M = 35.89$, $SD = 13.82$) and was predominantly White/Caucasian (81%). Participants' self-reported household income ranged from 19% of the sample indicating they were in the \$0 – \$25K household income range, 43% indicating their household income as \$25K - \$50K, 29% indicating their household income as \$50K - \$100K, and 9% indicating their household income as \$100K - \$200K, representing an impressive sample distribution of income.

Procedure. Participants first completed one of three randomly assigned writing tasks intended to manipulate personal control. After the manipulation, participants filled out a personality and political attitudes survey which included questions on: meritocratic values, perceptions of future economic success, and basic demographics. After completing the measures, all participants were fully debriefed as to the true nature of the experiment and paid for participating in the study (\$0.40).

Manipulation. Personal control was manipulated via a writing task. As a cover story, participants were told the experiment was concerned with the variance in narrative writing styles based on personality differences. Participants were randomly assigned to one of three conditions. In the *control threat condition* participants were asked to, "Please recall a particular incident in which something happened and you had absolutely no control over the situation. Please describe

the situation in which you felt a complete lack of control - what happened, how you felt, etc.” In the *control boost condition* participants were asked to, “Please recall a particular incident in which something happened and you had complete control over the situation. Please describe the situation in which you felt complete control - what happened, how you felt, etc.” And finally in the *neutral condition* participants were asked to, “Please tell us about your day leading up to your participation in this study. Please describe your day - what happened, how you felt, etc.”³

Measures

Meritocratic value endorsement. Nine items from the Capitalist Values Scale (McClosky & Zaller, 1984) were presented to participants. Items included: “Getting ahead in the world is mostly a matter of ability and hard work,” “Capitalism teaches people the value of hard work and success,” and “Any person who is able and willing to work hard has a good chance of succeeding.” Unless otherwise noted, all items for this and remaining scales were rated on a 7-point scale ranging from 1 (*Strongly Disagree*) to 7 (*Strongly Agree*). These items formed a reliable meritocratic value endorsement scale ($\alpha = .90$)

Future economic success. The same six items from study 1, measuring respondent perceptions of their future economic success, were employed in study two. Sample items included: “I believe I will be able to make more money in the future,” “I believe I will be able to improve my standard of living,” and “My chances for getting ahead in life represent a fair and just system.” The six items formed a reliable perception of future success scale ($\alpha = .86$).

Results

Controlling for condition effects, meritocratic value endorsement ($M = 4.11$, $SD = 1.31$) was correlated with future economic success ($M = 4.8$, $SD = 1.35$, $r = .62$, $p < .001$). A one-way between-subjects ANOVA was conducted to examine the impact of personal control (boost,

³ For a full listing of all primes used see Appendix B

threat, neutral) on meritocratic value endorsement. Analysis indicated a significant main effect of condition, $F(2, 86) = 3.25, p < .05, \eta^2 = .08$. Pair-wise comparisons (Fisher's LSD) revealed that participants in the control threat condition ($M = 4.54, SD = 1.08$) endorsed meritocratic values significantly more than individuals in either the control boost condition ($M = 3.92, SD = 1.18; p < .05$) or neutral condition ($M = 3.81, SD = 1.22, p < .01$). There was no significant difference between control boost and neutral conditions ($p > .05$).

Next, a one-way ANOVA was conducted on perceptions of future economic success. Analyses revealed no main effect of condition on perceptions of future success, $F(2, 86) = .29, p = ns$. Because I specifically predicted that endorsement of meritocratic values should alleviate the effects of the threat to personal control, the absence of this main effect on perceptions of future success suggested that it may be due to participants being able to endorse merit based values prior to their assessment of future success. To test this prediction, I dummy-coded the experimental conditions (neutral or boost = 0; and threat = 1) to explore the specific effect of the threat condition. Consistent with the omnibus test above, there was no significant difference between the boost and neutral conditions ($M = 4.8$) and the threat condition ($M = 4.7$) on perceptions of future economic success, $F(1, 87) = .25, p = ns$. However, when controlling for meritocratic value endorsement a difference emerges between the boost and neutral conditions ($M = 5.0$) and threat condition ($M = 4.4$) on perceptions of future economic success, $F(1, 86) = 4.86, p < .05, \eta^2 = .05$. (See Fig. 2 for a graphical comparison of marginal means).

These results indicated the predicted suppression effect⁴ of meritocracy on the relationship between personal control and perceptions of future economic success. In other

⁴ A suppression effect is tested in exactly the same manner as you would test for a mediation effect, however a suppression model tests whether or not including a third variable into the model will expose a previously hidden c path between the predictor and outcome, instead of accounting for the previously significant c path as a mediation effect does.

words, the absence of an omnibus difference in perceptions of future economic success between conditions may be due to participants in the threat condition more strongly endorsing meritocratic values. To test this I used the same dummy coding system as before and used Preacher and Hayes's (2008) bootstrapping procedure. The dummy-code representing the complex comparison between the threat condition and the collapsed boost/neutral conditions was included as the predictor of perceptions of future economic success with meritocratic value endorsement as the proposed suppression variable. Five-thousand bootstrap re-samples were performed. As predicted, the 95% confidence interval obtained for the dummy coded condition on future success, through the suppression effect of meritocratic value endorsement did not contain zero (.11 , .70). (See Fig. 3 for a graphical depiction of the suppression model).

Discussion

Study 2 results support the hypothesis that having people think about a time they had no personal control led to a more negative outlook on future economic success when compared to those in a control boost or neutral condition, unless people were able to cling to meritocratic values and thereby restore their confidence in their economic future. The significant suppression model shows that individuals in the control threat condition highly endorse merit-based prescriptions for economic success, and that via this endorsement they are able to positively evaluate their economic future.

After being reminded of a time when they felt a lack of personal control, individuals endorsed meritocratic values for economic success to a greater degree than those who were reminded of a time when they had complete control or those who simply recounted their day. It was this endorsement of merit based prescriptions for success that allowed individuals in a control threat condition to see their economic future as bright as those individuals in the other

two conditions. Findings from the present study suggest that meritocracy as an individualized prescription for economic success can compensate for threats to personal control, without motivating the individual to look to external systems to provide this desired sense of personal control.

Study 3

Study 2 provided the first explicit test of the relationship between merit based values for economic success and perceptions of personal control. In study 3 I tested the inverse direction between meritocracy and personal control. I investigated this relationship further by testing the inverse directionality. I hypothesized that invalidating specific merit based prescriptions for economic success would decrease perceptions of personal control. I also hypothesized that this threat would not affect ratings of the more general American system, showing that threats to merit based values represent a specific threat rather than a more general “meaning” threat.

Method

Participants. Fifty-seven undergraduates (27 women) from the University of Kansas participated in the study for partial course credit. The sample ranged in age from 18 to 26 ($M = 19.29$, $SD = 1.65$) and was predominantly White/Caucasian (82%).

Procedure. Participants were told they would be participating in a personality and political measures study. First, they were asked to complete a reading task on American economics which was intended to manipulate the validity of individualized meritocratic values for success. After completing the reading task, they were asked to complete several measures including: a shortened version of the meritocratic values scale (adapted from study 2), a shortened version of the personal control scale (adapted from study 1), a general system

justification scale (taken from study 1), and demographics. Once they completed the measures participants were fully debriefed as to the true nature of the experiment.

Manipulation. Meritocratic values was manipulated via a reading task. In the *meritocratic invalidation condition* participants read a NY Times article (developed by the researcher) that stressed the lack of economic progress by those employing merit based tactics such as hard work, talent and effort. Participants were led to believe that, "...The promise of hard work, talent, and a college education paying off in making more money is no longer true. In today's America it seems one can possess all three of these crucial elements and still get left far behind." In the *meritocratic affirmation condition* participants read the same article but this time the text was manipulated to highlight the success of merit based tactics for economic success, "...The promise of hard work, talent, and a college education paying off in making more money is still true. In today's America it seems one can possess all three of these crucial elements and still get their dream fulfilled." In the *neutral condition* participants read an article describing the economic differences between the coal and timber markets. All articles were approximately the same length, and the meritocratic affirm and threat conditions were similarly worded with only minor alterations to the text to either affirm or invalidate merit based prescriptions for economic success.

Measures

Meritocratic value endorsement. A four-item version of meritocratic value endorsement (used in study 2) was presented to participants. Items included: "Most people who don't succeed at life don't put in enough work or effort," "Any person who is able and willing to work hard has a good chance of succeeding," "People who fail at getting ahead have usually not tried hard

enough,” and “A person’s income should depend on their effort, education and talent.” These items formed a reliable meritocratic value endorsement scale ($\alpha = .79$)

Personal control. Four items from the personal control scale employed in study 1 were presented to participants. Items included: “The events in my life are mainly determined by my own actions,” “I often feel helpless in dealing with the problems of life,” (reversed) “Sometimes I feel that I’m being pushed around in life,” (reversed) and “I can do just about anything I really set my mind to.” These items formed a reliable perception of control scale ($\alpha = .70$).

Global system justification. Eight items from the general system justification scale (Kay & Jost, 2003) were presented to participants. Items included: “In general, you find society to be fair,” “Most policies serve the greater good,” and “Our society is getting worse every year” (reversed). The eight items formed a reliable system justification scale ($\alpha = .78$).

Results

Controlling for condition effects, meritocratic value endorsement ($M = 4.7$, $SD = 1.06$) was correlated with personal control ($M = 5.4$, $SD = .94$, $r = .38$, $p < .001$), and global system justification ($M = 3.8$, $SD = .89$, $r = .38$, $p < .001$), and personal control was correlated with global system justification ($r = .25$, $p < .05$). A one-way between subjects ANOVA was conducted to examine the impact of ideological message (affirm, invalidation, neutral) on meritocratic value endorsement. Analyses indicated there was a significant main effect of condition, $F(2, 57) = 3.59$, $p < .05$, $\eta = .13$. Pair-wise comparisons (Fisher’s LSD) revealed that participants in the ideology threat condition endorsed meritocratic values significantly less ($M = 4.34$, $SD = 1.04$) than individuals in either the ideology affirm condition ($M = 5.14$, $SD = .86$; $p < .01$) or the neutral condition ($M = 4.95$, $SD = .85$, $p < .05$). The ideology affirmation and neutral conditions did not significantly differ. To test whether the ideology threat manipulation

was affecting participant's global sense of meaning, rather than a specific threat to merit based values, a one-way between subjects ANOVA was run predicting global system justifying attitudes by condition. Results indicate that our manipulation was indeed specific to meritocracy and not more general attitudes towards the legitimacy of the overall system, $F(2, 57) = .66$, ns.

To test the main hypothesis, a one-way between subjects ANOVA was conducted to examine the impact of ideological message on perceptions of personal control. Analyses indicated there was a significant main effect of condition, $F(2,55) = 6.26$, $p < .01$, $\eta = .23$. Pair-wise comparisons (Fisher's LSD) revealed that participants in the ideology threat condition perceived significantly less personal control ($M = 4.85$, $SD = .91$) than individuals in either the ideology affirm condition ($M = 5.81$, $SD = .74$; $p < .001$) or the neutral condition ($M = 5.47$, $SD = .86$, $p < .05$). The ideology affirmation and neutral conditions did not significantly differ. (See Figure 5. for a graphical depiction of personal control by condition).

Discussion

Study 3 provided further support for the relationship between meritocratic prescriptions for economic success and perception of personal control. When specific merit based values for economic success such as hard work, effort and talent were explicitly invalidated participants endorsed these values less, and more importantly showed lower levels of perceived personal control. Notably participants did not exhibit a 'defensive' reaction by reaffirming their endorsement of the threatened ideology as has been previously found in system justification literature (Kay et. al, 2011), perhaps illustrating that not all aspects of the system will be defended when threatened.

Also of interest is the evidence that threats to merit based prescriptions for success did not affect participants overall justification of the American system. This provides some evidence

that meritocracy; at least when conceptualized at the individual level, should not be treated as interchangeable with ratings of global system justification, but instead should be treated as a unique and distinct *part* of the overall American system.

General Discussion

This paper began by highlighting a contradiction. On the one hand, U.S. economic indicators paint a bleak picture of inequity and group disparities on distribution of important resources. On the other hand, there seems to be overwhelming public support for individualized efforts for attaining economic success. There is a rift between the economic context and psychological experience of many Americans. Why is there this disconnect? I argue that part of the answer lies in the potency of meritocracy to satisfy an individual's epistemic need for control. Through 3 studies evidence was provided showing that merit based values for success are important factors for predicting perceptions of personal control and beliefs in future economic success.

In summary, study 1 findings indicate endorsement of merit based values provides individuals with a positive perception of future economic success, and that this relationship is partially mediated by perceptions of personal control. Study 2 demonstrated that when individuals are reminded of a time when they lacked control over an event, they support merit based values for economic success more so than participants in either a control boost or neutral condition. Furthermore, adherence to the dominant ideology enabled participants (in the threat condition) to positively evaluate their prospects for future economic success. These results strongly suggest that when individuals suffer a perceived loss of personal control, they can utilize merit based values to reaffirm their sense of control over future economic outcomes. Study 3 demonstrates that when merit based tactics for economic success are invalidated,

participants suffer a loss of perceived personal control. Moreover, a threat to meritocracy is specific to merit based prescriptions for economic success and does not affect global justifications of the American system. This indicates that meritocracy at the individualized level (e.g., as prescriptions for “getting ahead”) should not be treated the same as general system justification, and should be viewed as a distinct part of the more general American ideology. It is worth noting that threatening an aspect of the ‘system’ (in study 3) did not result in the bolstering of that aspect as a defensive reaction. It may be that personalized ideologies compared to external systems can be readily adjusted to make up for threats by re-defining what is important. However, this “defensive reaction” perspective would not account for the loss of personal control experienced by participants. Future work should examine the conditions under which people will or will not respond with strong endorsement to threats against aspects of the social system. Taken together, these studies provide evidence that I can expand our theoretical and empirical knowledge of the legitimization or rejection of the existing social order by better defining the many socio-political aspects of the more general American system (e.g. ideologies, criminal justice procedures, political participation, etc.).

It is important to recognize that these findings, while focusing on the individual, do not run contrary to the compensatory control perspective (Kay et al., 2008). In fact when considering ideology, it is apparent that they fit rather well. Americans do not randomly choose to believe that individual efforts are the most practical or useful factors for economic achievement. This perspective is forcefully and extensively subjected onto the person from the larger social context (Jackman, 1994). Merit based values, at the individual level, represent adherence to the greater social ethos. That is, endorsement of prescriptions for “getting ahead” (e.g., working hard, showing effort, etc.), especially when personal control is lowered, show a support for the

dominant system. Therefore the current work can be seen as a bridge between perceiving aspects of the ‘self’ (e.g. uniqueness) as useful to protect/establish control and reliance on an external system in order to establish control on our behalf. In fact if asked, it is conceivable that most of our subjects might have reported that their adherence to merit based values for success were indeed representative of their ‘distinct self’ rather than any greater social ideology, marking just how pervasive the system’s moral values can become in our self-concepts.

Individualized ideologies in an American context are so palatable to our sense of individual rights and responsibilities, merit based prescriptions for success are seen as fair and legitimate by those on both sides of the economic divide (Jackman, 1994; Jost & Banaji, 1994; Kluegel & Smith, 1986). The moral nature of the meritocratic system lends itself to adherence by those it serves to promote and those it keeps underfoot. A better understanding of the individualized nature of meritocracy and how it promotes a sense of control over economic outcomes is central to understanding why individuals rely on this route for economic attainment despite its lack of efficacy for so many. Unless I more fully understand meritocracy at the individual level and the resulting psychological outcomes, I will not be able to shift the emphasis to more group based tactics for economic success, which is critical for social justice.

While this research provides strong evidence for the proposed relationships, there are certain limitations of the current work that should be addressed. While a more representative community sample (as opposed to a college sample) was used, the studies still deal with a predominantly White sample. At present, findings cannot speak to whether the relationships found generalize to ethnic/racial minorities. Future work should take into account the intersection of social identities and endorsement of merit based values, especially from those groups systematically denied equal access to resources. Also while the argument presented has

been that a sense of personal control is central to perceptions of future economic success under a meritocratic ideology, there are other important aspects of the self that were not investigated. Future research should seek to understand different aspects of the self, such as self-esteem or self-determination and their relationship to personal control and merit based prescriptions for success.

This work was undertaken to start untangling why, in a culture where so many are systematically denied economic success there are still many individuals who would endorse individualized tactics for success. Why? As I have stated already, endorsing meritocratic values serves the function of engendering/maintaining perceptions of personal control. It is conceivable that people may value meritocracy for this purpose *regardless* of whether it *ultimately* affects material outcomes. If belief in merit serves epistemic needs for control, both connected to and apart from economic outcomes, then its endorsement at the individual level may lead individuals to stomach the negative outcomes they experience in American society (e.g. unemployment, lack of health care, insufficient living wage, etc.). With this perspective in mind, the most important next step for this line of research is to investigate how the promotion of group level identities may combat this overreliance on merit based prescriptions for success, and instead be used to alleviate threats to personal control - possibly finding group based routes to attain perceived control. And, moreover, perceptions of positive future economic success could be motivated through collective control rather than individualized tactics.

Recent work on prejudice reduction (Dixon, Tropp, Durrheim & Tredoux, 2010; Wright & Lubensky, 2008) has posited that perhaps the emphasis on reducing intergroup identity between dominants and subordinate groups might actually serve to sustain inequality. By seeing a common identity dominants may not feel especially guilty or motivated to change the existing

relationship while subordinate group members may come to view dominants more positively and perceive less systematic inequality afforded their group. In line with this theoretical perspective, adherence to individualized prescriptions for economic success (that hide group based factors) under a meritocratic ideology work to disguise and silence group based inequalities. Moreover, this ideology can work to diffuse perceptions of collective tactics that could attenuate group based inequalities in economic attainment.

I began this paper with a quote representing the idealized perspective of meritocracy and while this perspective is a worthy notion and perhaps something that may be attained one day, I choose to end this paper with a different perspective, one that comments on the practical application of meritocracy in America. Social historian and peace activist Howard Zinn (1995),

“There are memories of my father and mother, who met as immigrant factory workers, who worked hard all their lives and never got out of poverty. I always feel some rage when I hear the voice of the arrogant and affluent: We have a wonderful system; if you work hard you will make it. How hard my parents worked. How brave they were just to keep four boys alive in the cold water tenements of Brooklyn.”

References

- Adams, J. T. (1931). *The epic of America*. USA: Boston, Little, Brown, and Company.
- Chen, E. S., & Tyler, T. R. (2001). Cloaking power: Legitimizing myths and the psychology of the advantaged. In A. Y. Lee-Chai, & J. A. Bargh (Eds.), *The use and abuse of power: Multiple perspectives on the causes of corruption*. (pp. 241-261). New York, NY, US: Psychology Press.
- Cozzarelli, C., Wilkinson, A. V., & Tagler, M. J. (2001). Attitudes toward the poor and attributions for poverty. *Journal of Social Issues*, 57, 207-227.
- Crandall, C. S. (1994). Prejudice against fat people: Ideology and self-interest. *Journal of Personality and Social Psychology*, 66(5), 882-894.
- Croizet, J., & Millet, M. (2012). Social class and test performance: From stereotype threat to symbolic violence and vice versa. In M. Inzlicht & T. Schmader (Eds.), *Stereotype threat: Theory, process, and application* (pp. 188-201). New York, NY, US: Oxford University Press.
- Day, M. V., Kay, A. C., Holmes, J. G., & Napier, J. L. (2011). System justification and the defense of committed relationship ideology. *Journal of Personality and Social Psychology*, 101, 291-306.
- Dixon, J., Tropp, L. R., Durrheim, K., & Tredoux, C. (2010). "Let them eat harmony": Prejudice-reduction strategies and attitudes of historically disadvantaged groups. *Current Directions in Psychological Science*, 19(2), 76-80.
- Dovidio, J. F., & Gaertner, S. L. (1996). Affirmative action, unintentional racial biases, and intergroup relations. *Journal of Social Issues*, 52, 51-75.
- Festinger, L. (1957). *A theory of cognitive dissonance*, Stanford, CA: Stanford University Press.

Frank, R. (2010, November 14th). Who will stand up to the superrich? *The New York Times*.

Retrieved from <http://www.nytimes.com/2010/11/14/opinion/14rich.html>

Garcia, D. M., Desmarais, S., Branscombe, N. R., & Gee, S. S. (2005). Opposition to redistributive employment policies for women: The role of policy experience and group interest. *The British Journal of Social Psychology*, 44, 583-602.

Heider, F. (1958). *The psychology of interpersonal relations*, New York: Wiley.

Hochschild, J. L. (1995). *Race, class, and the soul of the nation: Facing up to the american dream*. Princeton, NJ: Princeton University Press.

Jackman, M. R. (1994). *The velvet glove: Paternalism and conflict in gender, class, and race relations*. Berkeley, CA: University of California Press.

Jost, J. T., & Banaji, M. R. (1994). The role of stereotyping in system-justification and the production of false consciousness. *British Journal of Social Psychology. Special Issue: Stereotypes: Structure, Function and Process*, 33(1), 1-27.

Jost, J. T., Banaji, M. R., & Nosek, B. A. (2004). A decade of system justification theory: Accumulated evidence of conscious and unconscious bolstering of the status quo. *Political Psychology*, 25(6), 881-919.

Jost, J. T., Blount, S., Pfeffer, J., & Hunyady, G. (2003). Fair market ideology: Its cognitive-motivational underpinnings. In R. M. Kramer, & B. M. Staw (Eds.), (pp. 53-91). Oxford, England: Elsevier Science Ltd.

Jost, J. T., Federico, C. M., & Napier, J. L. (2009). Political ideology: Its structure, functions, and elective affinities. *Annual Review of Psychology*, 60, 307-337.

- Jost, J. T., & Hunyady, O. (2002). The psychology of system justification and the palliative function of ideology. In W. Stroebe, & M. Hewstone (Eds.), (pp. 111-153). Hove, England: Psychology Press/Taylor & Francis (UK).
- Jost, J. T., Pelham, B. W., Sheldon, O., & Sullivan, B. N. (2003). Social inequality and the reduction of ideological dissonance on behalf of the system: Evidence of enhanced system justification among the disadvantaged. *European Journal of Social Psychology*, 33(1), 13-36.
- Jost, J. T. & Thompson, E. P. (2000). Group-based dominance and opposition to equality as independent predictors of self-esteem, ethnocentrism, and social policy attitudes among African Americans and European Americans. *Journal of Experimental Social Psychology*, 36, 209-232.
- Kay, A. C., Gaucher, D., Napier, J. L., Callan, M. J., & Laurin, K. (2008). God and the government: Testing a compensatory control mechanism for the support of external systems. *Journal of Personality and Social Psychology*, 95(1), 18-35.
- Kay, A. C., Gaucher, D., Peach, J. M., Laurin, K., Friesen, J., Zanna, M. P., & Spencer, S. J. (2009). Inequality, discrimination, and the power of the status quo: Direct evidence for a motivation to see the way things are as the way they should be. *Journal of Personality and Social Psychology*, 97(3), 421-434.
- Kay, A. C., & Jost, J. T. (2003). Complementary justice: Effects of "poor but happy" and "poor but honest" stereotype exemplars on system justification and implicit activation of the justice motive. *Journal of Personality and Social Psychology*, 85(5), 823-837.
- Kluegel, J. R., & Smith, E. R. (1986). *Beliefs about inequality: Americans' view of what is and what ought to be*. Hawthorne, NY, US: Aldine de Gruyter.

Lane, R. E. (1962). *Political ideology: Why the american common man believes what he does*.

Oxford, England: Free Press of Glencoe.

Mandisodza, A. N., Jost, J. T., & Unzueta, M. M. (2006). "Tall poppies" and "american dreams":

Reactions to rich and poor in australia and the united states. *Journal of Cross-Cultural Psychology*, 37(6), 659-668.

Marx, K., & Engels, F. (1981). *The Marx-Engels correspondence: The personal letters, 1844 -*

1877; a selection. F.J. Raddatz, (Ed.). London: Weidenfeld and Nicolson.

McClosky, H., & Zaller, J. (1984). *The american ethos: Public attitudes toward capitalism and*

democracy. Cambridge, MA: Harvard University Press.

New York Times. (2005). *Class Matters*. New York, NY: Henry Holt & Company.

McCoy, S. K., & Major, B. (2007). Priming meritocracy and the psychological justification of

inequality. *Journal of Experimental Social Psychology*, 43, 341-351.

Paulhus, D. (1982). Individual differences, self-presentation, and cognitive dissonance: Their

concurrent operation in forced compliance. *Journal of Personality and Social*

Psychology, 43(4), 838-852.

PEW Research Center (2012). Economic mobility and the american dream: Where do we stand

in the wake of the great recession? Retrieved April 17, 2012, from [http://www.pew](http://www.pewstates.org/research/analysis/economic-mobility-and-the-american-dream-where-do-we-stand-in-the-wake-of-the-great-recession-85899378421)

[states.org/research/analysis/economic-mobility-and-the-american-dream-where-do-we-stand-in-the-wake-of-the-great-recession-85899378421](http://www.pewstates.org/research/analysis/economic-mobility-and-the-american-dream-where-do-we-stand-in-the-wake-of-the-great-recession-85899378421)

Rankin, L. E., Jost, J. T., & Wakslak, C. J. (2009). System justification and the meaning of life:

Are the existential benefits of ideology distributed unequally across racial groups? *Social*

Justice Research, 22, 312-333.

- Saulny, S. (2012). Few minds are changed by arguments in court. *New York Times*. Retrieved from <http://www.nytimes.com/2012/03/29/us/health-care-debate-ripples-across-us-as-hearings-end.html>
- Scott, J., & Leondhardt, D. (2005, May 15). Shadowy lines that still divide. *The New York Times*. Retrieved from <http://www.nytimes.com/2005/05/15/national/class/OVE...0&en=b210127da4dfebcc&ex1118635200&pagewanted=print>.
- Shepherd, S., Kay, A. C., Landau, M. J., & Keefer, L. A. (2011). Evidence for the specificity of control motivations in worldview defense: Distinguishing compensatory control from uncertainty management and terror management processes. *Journal of Experimental Social Psychology*, 47, 949-958.
- Shipler, D. K. (2005). *The working poor*. New York, NY: Random House, Inc.
- Sidanius, J. (1993). The psychology of group conflict and the dynamics of oppression: A social dominance perspective. In S. Iyengar, & W. J. McGuire (Eds.), (pp. 183-219). Durham, NC, US: Duke University Press.
- Sidanius, J., & Pratto, F. (1999). *Social dominance: An intergroup theory of social hierarchy and oppression*. New York, NY, US: Cambridge University Press.
- Tyler, T. R., Boeckmann, R. J., Smith, H. J., & Huo, Y. J. (1997). *Social justice in a diverse society*. Boulder, CO, US: Westview Press.
- U.S. Census Bureau. (2011). Income, Expenditures, Poverty, and Wealth. Statistical Abstract of the United States.
- U.S. Census Bureau. (2011). Income, Poverty, and Health Insurance Coverage in the United States: 2010. Current Population Report.

Wright, S.C., & Lubensky, M. (2008). The struggle for social equality: Collective action vs. prejudice reduction. In S. Demoulin, J.P. Leyens & J.F. Dovidio (Eds.), *Intergroup misunderstandings: Impact of divergent social realities* (pp. 291–310). New York: Psychology Press.

Zinn, H. (1994). *You can't be neutral on a moving train: A personal history of our times*. Boston, MA: Beacon Press.

Figure 1. *Indirect effect of meritocracy on future success through personal control, Study 1.*

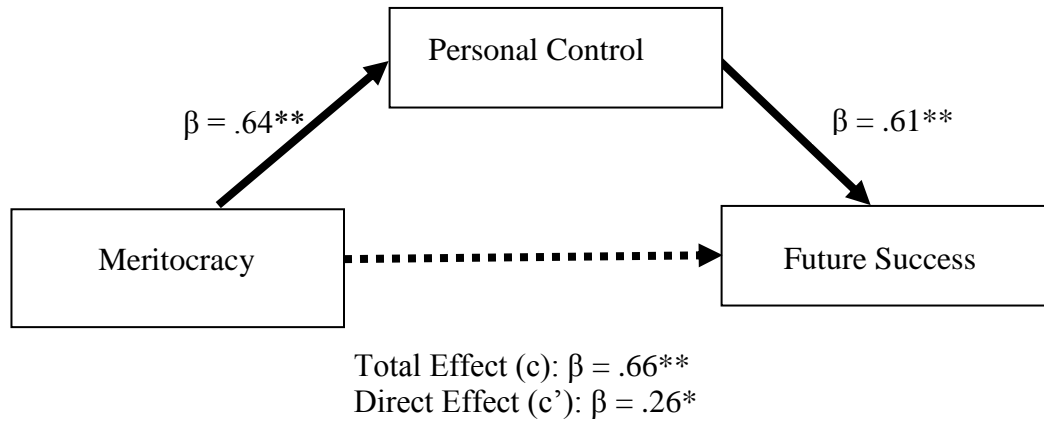


Figure 2. *Marginal means of dummy conditions on perceptions of future economic success; with and without meritocracy in the model, Study 2.*

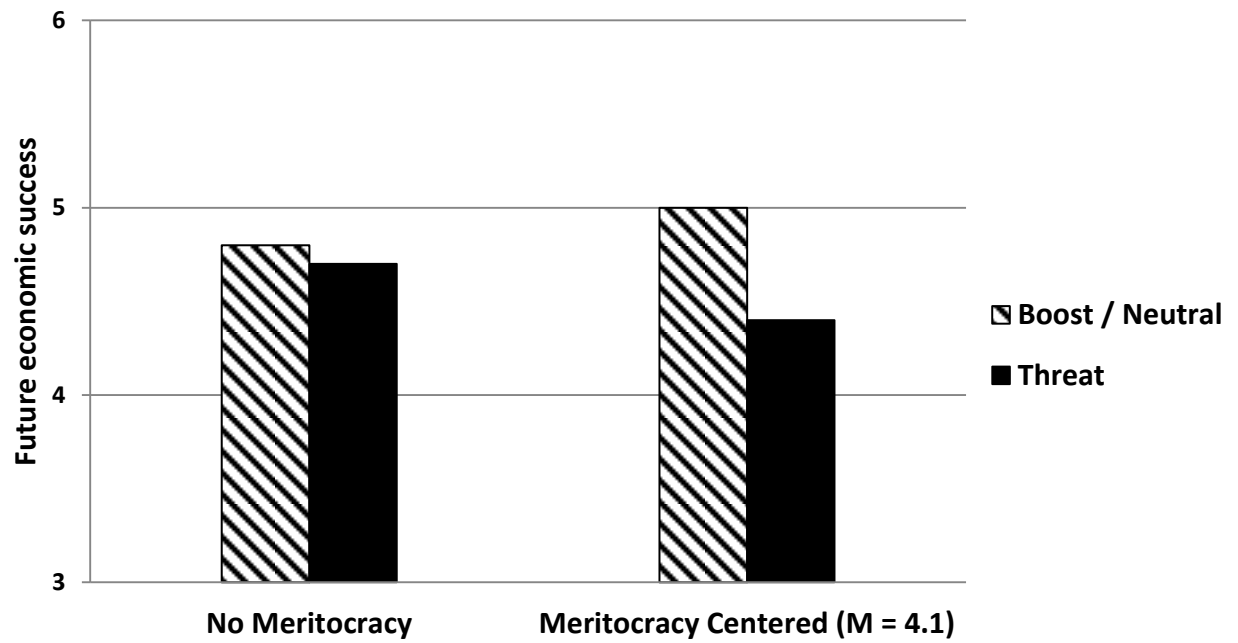
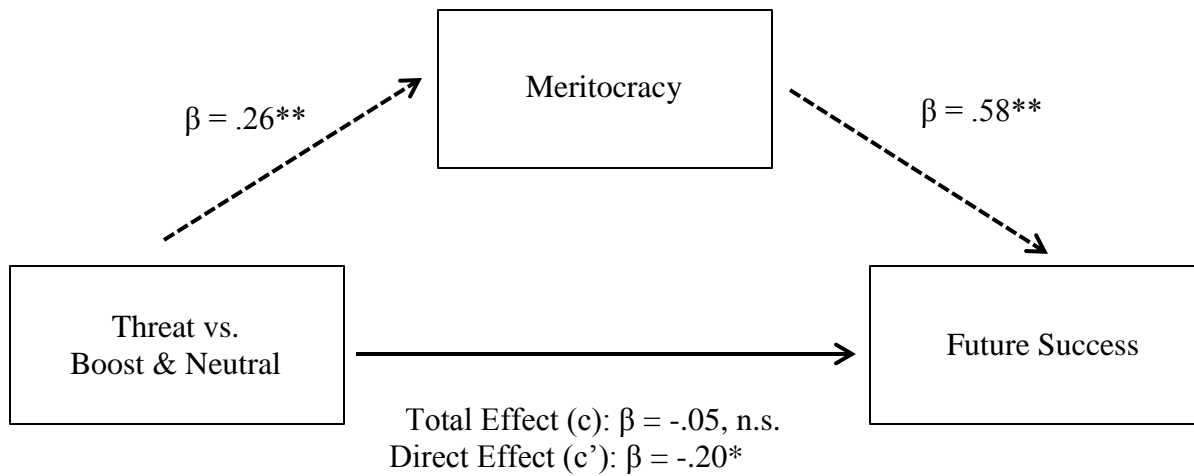


Figure 3. *Suppression model of condition predicting perceptions of future success accounting for merit endorsement, Study 2.*



Note. The direct effect coefficient represents the effect of the independent variable after controlling for the effect of meritocracy on future success.

Total adjusted R^2 for the model = .31, $F(2, 86) = 19.41$, $p < .001$

* Significant at $p < .05$

** Significant at $p < .01$

Figure 4. *Means of merit value endorsement and system justification by condition, Study 3.*

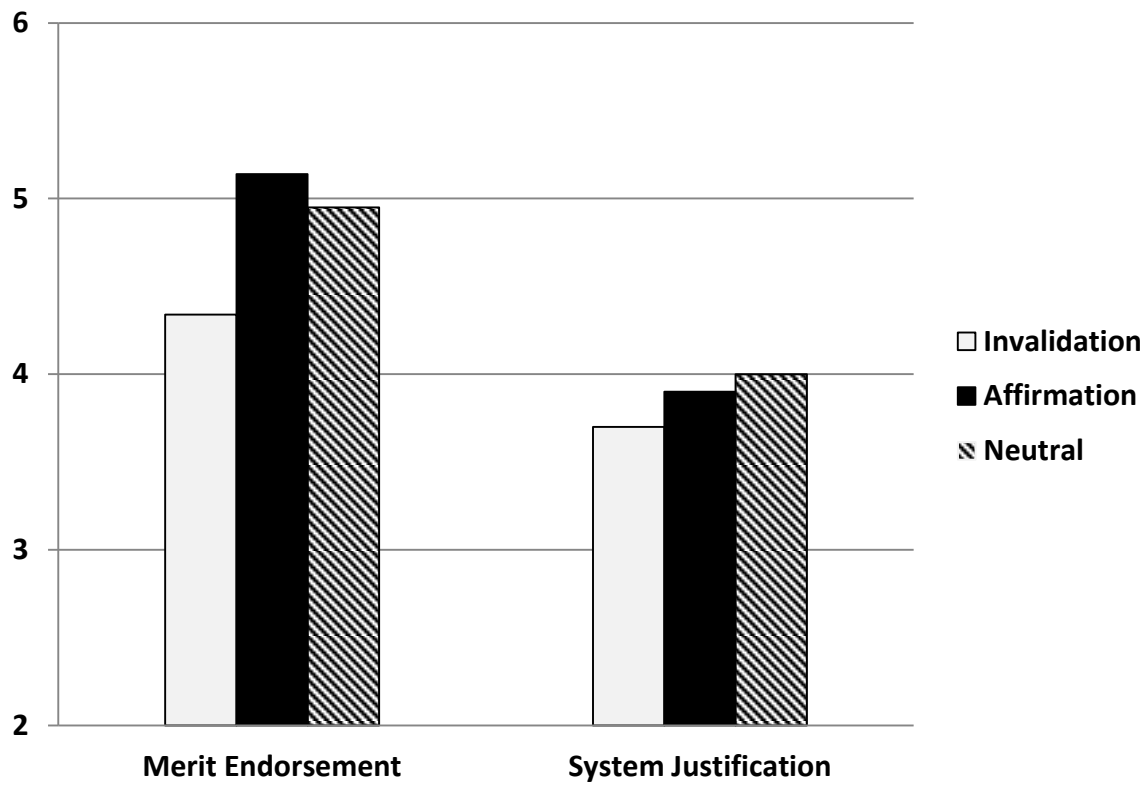
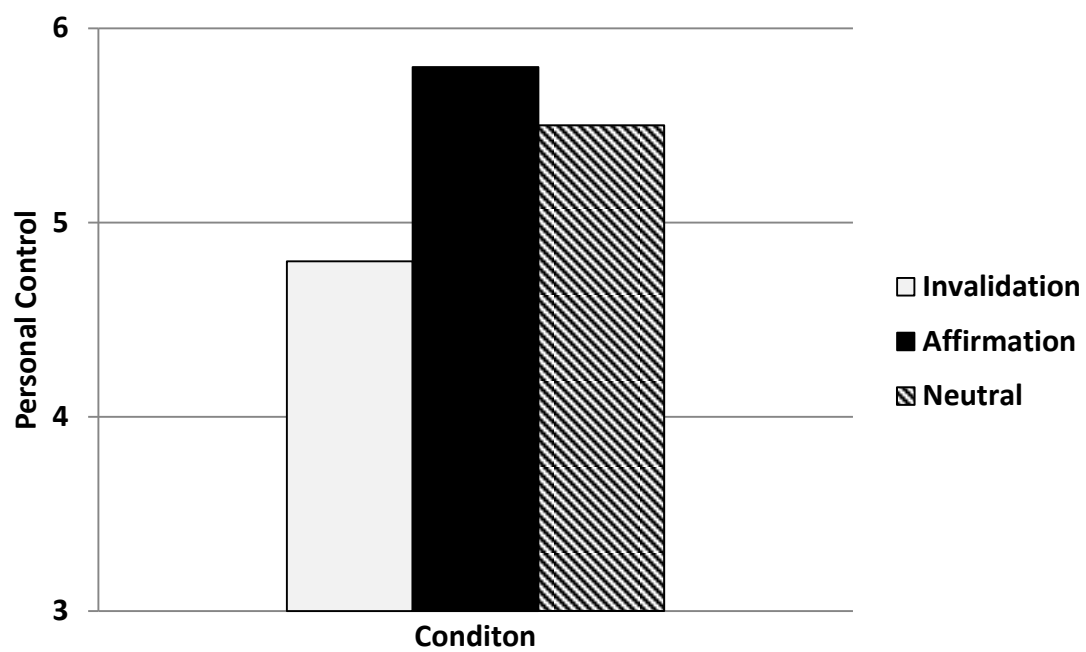


Figure 5. *Perceived personal control by ideological condition, Study 3.*



Appendix A

Measures:

Personal Efficacy Scale (Palhus, 1983)

When I get what I want it's usually because I worked hard for it.

When I make plans I am almost certain to make them work.

I prefer games involving some luck over games requiring pure skill. (R)

I can learn anything if I set my mind to it.

My major accomplishments are entirely due to hard work and intelligence.

I usually don't make plans because I have a hard time following through on them. (R)

Competition encourages excellence.

The extent of personal achievement is often determined by chance. (R)

On any sort of exam or competition I like to know how well I do relative to everyone else.

Despite my best efforts I have few worthwhile accomplishments. (R)

Mastery Scale (Pearlin et al., 1981)

I have little control over the things that happen to me

There is really no way I can solve some of the problems I have.

There is little I can do to change many of the important things in my life.

I often feel helpless in dealing with the problems of life

Sometimes I feel that I'm being pushed around in life.

What happens to me in the future mostly depends on me. (R)

I can do just about anything I really set my mind to do. (R)

Capitalist Values Scale (McClosky & Zaller, 1984)

Most people who don't succeed at life don't put in enough work or effort.

Any person who is able and willing to work hard has a good chance of succeeding.

People who fail at getting ahead have usually not tried hard enough.

Hard work offers little guarantee of success.

An education, hard work, and talent are all anyone needs to be successful.

Capitalism teaches people the value of hard work and success.

The poor are poor because they don't try hard enough to get ahead.

Getting ahead in the world is mostly a matter of ability and hard work.

A person's income should depend on their effort, education and talent.

Future Economic Success

I am frustrated at my chances for getting ahead in life.

I am hopeful about improving my chances for getting ahead in life.

I believe I will be able to make more money in the future.

My chances for getting ahead in life represent a fair and just system.

I am satisfied with my chances for getting ahead in life.

I believe I will be able to improve my standard of living.

Appendix B

Primes for Study 2:

Control: Please recall a particular incident in which something happened and you had complete control over the situation. Please describe the situation in which you felt complete control - what happened, how you felt, etc.

Lowered Control: Please recall a particular incident in which something happened and you did not have any control over the situation. Please describe the situation in which you felt a complete lack of control - what happened, how you felt, etc.

Neutral: Please tell us about your day leading up to your participation in this study. Please describe your day - what happened, how you felt, etc. (If you are taking this survey in the morning, please tell us about yesterday)

Appendix C

Primes for study 3:

Ideology Affirmation Condition:

Still Possible for Americans to Rise from Lower Rungs

By JASON DePARLE

WASHINGTON — Benjamin Franklin did it. Henry Ford did it. And American life is built on the faith that others can do it, too: rise from humble origins to economic heights. “Movin’ on up,” George Jefferson-style, is not only a sitcom song but a civil religion.

Many researchers have reached a conclusion that supports conventional wisdom: Americans today still enjoy more economic mobility than previous generations.

At least five large studies in recent years have found the United States to still be more economically mobile than comparable nations (PEW Research Center). Researchers find that on average about 62 percent of Americans (male and female) raised in middle income class move into the top two-fifths, similarly, 65 percent born in the bottom two-fifths move into the middle and upper middle incomes. According to the research, the best predictor of an individual’s income is not how much money their parents made, but how *hard* they work and their level of education.

We highlight the story of Ralph Johnson, a 35 year old American with a lower-class background from rural America;

“I worked hard my whole life; from the age of 14 I always had at least one part-time job. After high school I worked my way through Ohio State University, graduating with honors and earning a Bachelor’s degree in Accounting. From the fall following my senior year I worked, I worked late hours, I worked weekends...even after the recession hit I worked hard...I just refused to quit or blame anyone I guess. My company took a hard hit, our retirement and investment packages shrunk...but it didn’t go away. Now I’m a junior executive at my accounting firm...we just bought our new house, we are gaining on our future...It makes me happy because...because since I was a boy I believed that if I worked hard, got an education, and used my God given talents I would succeed, that was the promise of America...and I’m here as proof, you can grow up poor, you can survive a recession...this is the land of opportunity and financial success...it’s still marked by fulfilled dreams and stories of hard work and success.”

Ralph’s story is not unique, many of the Americans we talked to highlight a similar story, the continued success of hard work and natural talent in getting ahead in American life. Liberals and Conservatives alike have argued that the present evidence suggests a strong level of access to the American Dream in spite of economic downturns. The promise of hard work, talent, and a

college education paying off in making more money is still true. In today's America it seems one can possess all three of these crucial elements and still get their dream fulfilled.

Ideology Invalidation Condition:

Almost Impossible for Americans to Rise from Lower Rungs

By JASON DePARLE

WASHINGTON — Benjamin Franklin did it. Henry Ford did it. And American life is built on the faith that others can do it, too: rise from humble origins to economic heights. “Movin’ on up,” George Jefferson-style, is not only a sitcom song but a civil religion.

But many researchers have reached a conclusion that turns conventional wisdom on its head: Americans today enjoy drastically less economic mobility than previous generations.

At least five large studies in recent years (PEW Research Center) have found the United States to be less economically mobile than comparable nations. Researchers find that on average about 62 percent of Americans (male and female) raised in the top fifth of incomes stay in the top two-fifths, similarly, 65 percent born in the bottom two-fifths stay in the bottom two-fifths. The best predictor of an individual's income is not how hard they work or their level of education, but instead how much their parents made.

We highlight the story of Ralph Johnson, a 35 year old American with a middle class background from rural America;

“I worked hard my whole life; from the age of 14 I always had at least one part-time job. After high school I worked my way through Ohio State University, graduating with honors and earning a Bachelor's degree in Accounting. From the fall following my senior year I worked, I worked late hours, I worked weekends...but after the downsizing...well it just all went away. My company folded, our retirement and investment packages crashed...everything I worked so hard for was gone. Now I'm a part time employee at a local tax preparation store...we lost our house, we lost our future...It makes me angry because...because since I was a boy I believed that if I worked hard, got an education, and used my God given talents I would succeed, that was the promise, but now...my father's America is gone...this is no longer the land of opportunity and financial success...it's now marked by failed dreams and broken promises.”

Ralph's story is not unique, many of the Americans we talked to highlight the same story, the failed success of hard work and natural talent in getting ahead in American life. Liberals and Conservatives alike have argued that the present evidence suggests a lack of access to the traditional American Dream. The promise of hard work, talent, and a college education paying off in making more money is no longer true. In today's America it seems one can possess all three of these crucial elements and still get left far behind.

Ideology Neutral Condition:

Timber on the Rise, Coal on the ropes.

By JASON DePARLE

WASHINGTON — We burn it. We create with it. Lincoln built a home with it. American timber is climbing in economic circles while coal takes a tumble. The energy market has been moving in a different direction over the last few years.

Many researchers have reached a conclusion that supports conventional wisdom: Americans today can use timber products for a variety of things above and beyond coal.

At least five large studies in recent years have found the United States to still be more productive in the timber market than comparable nations (PEW Research Center). Researchers find that on average about 62 percent of American timber products have various uses and can be used as export materials, similarly, coal products are in decline and are seeing much less return and vitalization on the market. According to the research, the best use of timber products in the manufacturing of environmentally sound buildings as well as energy producing windmills and natural gas pumps.

We highlight the story of Ralph Johnson, a 35 year old American timber farmer from rural America;

“I’ve grown timber my whole life; from the age of 14 I have always worked at least part-time in my daddy’s mill. After high school I worked my way through Ohio State University, graduating with honors and earning a Bachelor’s degree in Agriculture. From the fall following my senior year I’ve been full time in the timber industry. It’s what feeds my family and puts a roof over our heads. I think American is moving back to an emphasis on naturally sustained energy and building materials, moving from coal, which is a finite energy source, back to the versatile timber industry. Because of recent innovations in forestation, and tighter regulations against old grow cutting, not to mention foreign interests in exports, the timber industry is on the rise. I truly believe myself and other timber farmers will continue to see success as the rise of timber products and materials continues to outstrip coal production...and I’m here as proof, my farm is proof, the timber industry is back on the rise and this time it’s here to stay.”

Ralph’s story is not unique, many of the American timber farmers and coal field owners we talked to highlight a similar story, the continued success of timber versus coal in the American materials market. Liberal and Conservative economists alike have argued that the present evidence suggests a strong level of access to the American materials market for timber products at the same time that coal products are suffering a downturn. In today’s market it seems that timber is now outstripping the ore market and this trend does not look to change anytime soon.